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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,600	09/23/2005	Norbert Erhardt	66489-071-7	1969
25769 7590 10/19/2009 DYKEMA GOSSETT PLLC FRANKLIN SQUARE, THIRD FLOOR WEST 1300 I STREET, NW WASHINGTON, DC 20005				
EXAMINER				
HO, ALLEN C				
ART UNIT		PAPER NUMBER		
2882				
MAIL DATE		DELIVERY MODE		
10/19/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/550,600

**Applicant(s)**

ERHARDT ET AL.

**Examiner**

Allen C. Ho

**Art Unit**

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 28, 29, 31, 33 and 34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 28, 29, 31, 33 and 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2009 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the adjustment means housed in a common casing of the detector for adjusting a first x-ray the first image detector and the second image detector disposed on a rear side of the first image detector as claimed in claim 33 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
2. Fig. 5 is objected to because the blocks lack descriptive legends. See MPEP § 608.02(o).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Specification***

3. The disclosure is objected to because of the following informalities:

Page 13, line 15, "2" should be replaced by --55--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 28, 29, 31, 33, and 34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claims 28 and 29 recite "means for the creation of 3D images of a subvolume of a mandibular arch of the patient, which means create several 2D images from different directions and compute a 3D image therefrom using cone beam technology with associated construction algorithms." First of all, the specification does not describe means for creating several 2D image from different directions. It is unknown how the camera is used to create several 2D images from different direction. Secondly, the specification does not describe a means for computing a 3D image using cone beam technology with associated reconstruction algorithm.

Claim 29 recite "said camera is moved out of the optical path between said x-ray emitter and said image detector of said installation." The description does not describe any mechanism for moving the camera out of the optical path between the x-ray emitter and the image detector of the installation.

Claim 31 recites both "said second image detector is disposed alongside said first image detector" and "said second image detector is disposed on a rear side of said first image detector". The specification does not describe a second image detector that is disposed both alongside and rear side of a first image detector.

Claim 33 recites "said adjustment means and the two image detectors are housed in a common casing of said camera". The specification does not describe an adjustment means for adjusting a first image detector and a second image detector disposed on a rear side of the first image detector, wherein the adjustment means and the two image detectors are housed in a common casing of the camera.

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 28, 29, 31, 33, and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 28 and 29 recite "another image detector". It is unclear whether or not this imager detector refers to one of the first image detector and the second imager detector. Furthermore, since another image detector is recited in a passive manner, *i. e.*, "an installation for the creation

of teleradiographic images with another image detector", it is unclear whether or not the installation actually comprises another image detector.

Claim 29 recites the limitation "the optical path". There is insufficient antecedent basis for this limitation in the claim. Furthermore, this is confusing because x-rays are not optical rays.

Claim 29 recites "when the x-ray emitter is aligned for the creation of a teleradiographic image, said camera is move out of the optical path between said x-ray emitter and said image detector of said installation for the creation of teleradiographic images." This limitation is indefinite. First of all, the recitation does not identify with which structural element is the x-ray emitter aligned for the creation of teleradiographic images. Furthermore, the limitation does not identify a mechanism for moving the camera. It is unknown how the camera is moved out of the optical path.

Claim 31 recites "a common casing" in a passive manner. This limitation is indefinite. It is unclear whether or not the x-ray sensitive camera actually comprises a common casing.

Claim 31 recites "said image detector is disposed on a rear side of said first image detector", which contradicts with the recitation "said second image detector is disposed alongside said first image detector".

Claim 33 recites "a common casing". It is unclear whether or not "a common casing" refers to the casing recites in claim 31.

Claim 34 recites "said adjustment means are provided on said casing", which contradicts the recitation "said adjustment means and the two image detectors are housed in a common casing" recited in claim 33.

Claim 34 recites "in a region of connecting means for the attachment of said camera to a support". This limitation is indefinite. It is unclear what is meant by "in a region of connecting means." Furthermore, it is unclear whether the x-ray sensitive camera actually comprises the connecting means and the support since they are recited in a passive manner.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(c) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claim 31 is rejected under 35 U.S.C. 102(b) as being anticipated by Zeller *et al.* (U. S. Patent No. 6,055,292).

With respect to claim 31, Zeller *et al.* disclosed an x-ray sensitive camera that comprises: a casing (column 2, line 55-58); a first x-ray sensitive image detector (**18**) in the casing; a second x-ray sensitive image detector (**18'**) in the casing, wherein the second image detector is disposed alongside the first image detector (Figs. 3 and 5); and adjustment means (**9, 10**) for the purpose of causing the first image detector or the second image detector to assume correct alignment relative to an x-ray emitter for the creation of the respective x-ray image.

Alternatively:

With respect to claim 31, Zeller *et al.* disclosed an x-ray sensitive camera that comprises: a casing (column 2, line 55-58); a first x-ray sensitive image detector (**18**) in the casing; a second x-ray sensitive image detector (**18'**) in the casing, wherein the second image detector is disposed on a rear side of the first image detector (Figs. 9 and 10); and adjustment means (**9, 10**) for the purpose of causing the first image detector or the second image detector to assume correct alignment relative to an x-ray emitter for the creation of the respective x-ray image.

#### ***Response to Amendment***

10. Applicants' amendments filed 15 June 2009 with respect to the drawings have been fully considered. The objection of the drawings has been withdrawn.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen C. Ho whose telephone number is (571) 272-2491. The examiner can normally be reached on Monday - Friday from 9:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Allen C. Ho/  
Primary Examiner  
Art Unit 2882

14 October 2009